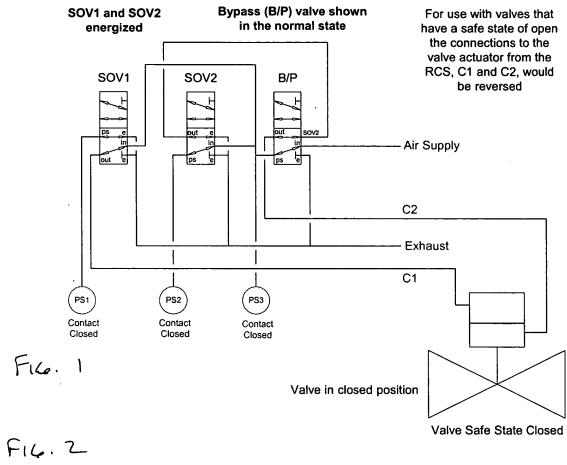
TITLE:

VARIABLE FUNCTION VOTING SOLENOID-OPERATED VALVE APPARATUS HAVING AIR-TO-MOVE VALVE ACTUATORS AND

TESTING METHOD THEREFOR

INVENTOR(S): BRYAN A. ZACHARY FILING DATE: APRIL 20, 2004

Double Acting Energize To Trip



Bypass NOT Active	Pressure Switch 1 Contact Status	Pressure Switch 2 Contact Status	Pressure Switch 3 Contact Status
SOV1 AND SOV2 Energized	Closed	Closed	Closed
SOV1 AND SOV2 De- energized	Open	Open .	Closed
SOV1 De- energized AND SOV2 Energized	Open	Closed	Closed
SOV1 Energized AND SOV2 De- energized	Closed	Open	Closed
Bypass Active	Closed	Open	Open

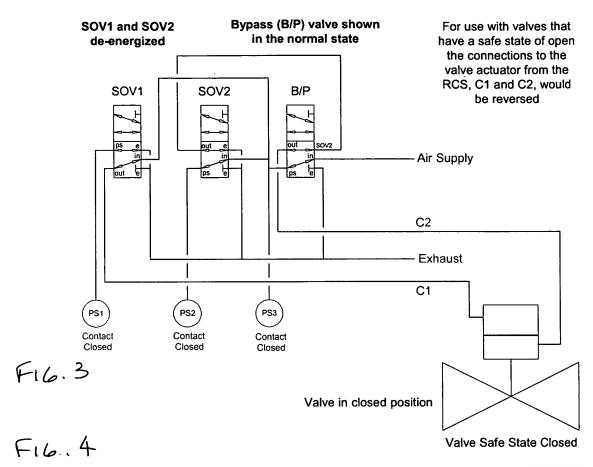
TITLE:

VARIABLE FUNCTION VOTING SOLENOID-OPERATED VALVE APPARATUS HAVING AIR-TO-MOVE VALVE ACTUATORS AND

TESTING METHOD THEREFOR INVENTOR(S): BRYAN A. ZACHARY

FILING DATE: APRIL 20, 2004

Double Acting De-energized to Trip



Bypass NOT Active	Pressure Switch 1 Contact Status	Pressure Switch 2 Contact Status	Pressure Switch 3 Contact Status
SOV1 AND SOV2 Energized	Open	Open	Closed
SOV1 AND SOV2 De- energized	Closed	Closed	Closed
SOV1 De- energized AND SOV2 Energized	Closed	Open	Closed
SOV1 Energized AND SOV2 De- energized	Open	Closed	Closed
Bypass Active	Closed	Open	Open